

5 What is claimed:

1. A method of forming an expandable tubular fabric comprising
providing an array of parallel yarns and continuously moving said yarns in
a first direction along an axis through a forming device;

providing a mandrel along said axis and arranging said yarns about said
10 mandrel during movement through said device;

providing an extruding member and arranging said extruding member about said
mandrel and said yarns;

causing said extruding member to rotate about said mandrel and said
yarns while extruding at least one filament;

15 causing said extruded filament to wrap around and adhere to said yarns
while moving through said forming device, said extruded filament securing said yarn in
their relative positions; and,

moving said wrapped yarns off said mandrel and setting said extruded
filament.

20 2. The method of claim 1 including drawing and heat setting yarns prior to
moving said yarns through said forming device.

3. The method of claim 1 providing said yarns forming said array of yarns
comprise at least one of nylon, polyester, polypropylene and polyethylene.

4. The method of claim 1 providing said filament comprise a thermoplastic
25 polymer.

5. The method of claim 1 including arranging said array of parallel yarns so
that adjacent of said yarns are substantially in contact with each other.

5 6. The method of claim 1 providing said extruder extrudes and wraps at least two filaments about said yarns.

7. The method of claim 1 including passing said array of yarns over a plurality of stretching rolls and heat setting said yarns in said stretched condition prior to passing said yarns through said forming device.

10 8. An expandable tubular fabric comprising:

a plurality of drawn thermoplastic filaments arranged along an ellipsoid path in juxtaposed positions forming an elongated tube;

at least one elastic thermoplastic filament helically wrapped about and bonded to said drawn longitudinal filaments forming helical wraps, said helical thermoplastic filament bonding with said drawn longitudinal filaments maintaining each
15 said drawn longitudinal filament in fixed position relative adjacent of said drawn longitudinal filaments forming said expandable tubular fabric.

9. The fabric according to claim 8 wherein said drawn filaments are of a first size and said thermoplastic filaments are of a second size, said second size being at
20 least twice the size of said first size.

10. The fabric according to claim 8 wherein adjacent of said drawn filaments are substantially in contact along their length.

11. The fabric according to claim 8 wherein said helical wraps formed by said filament are longitudinally spaced along the length of said drawn longitudinal filaments.

25 12. The fabric of claim 8 wherein said helical thermoplastic filament has a profiled cross-section.

5 13. The fabric of claim 8 wherein said helical filament has a circular cross-section.

 14. The fabric of claim 8 wherein said drawn longitudinal thermoplastic filaments have a circular cross-section.

 15. The fabric of claim 8 wherein said drawn longitudinal thermoplastic
10 filaments have a profiled cross section.

 16. The method of forming a tubular fabric including:

 heat setting a plurality of thermoplastic yarns producing drawn thermoplastic yarns;

 arranging said drawn yarns in an array about a shaped path in juxtaposed
15 positions and moving said drawn yarns in a first direction;

 extruding at least one filament along a circular path about said moving array of drawn yarns causing said extruded filament to bond with said drawn yarns along a helical path;

 setting said extruded filament in bonded position with said array of drawn
20 yarns causing said extruded filament to hold said drawn yarns in relative fixed positions forming said expandable tubular fabric.

 17. The method of claim 16 including extruding drawing and heat setting said thermoplastic yarns as a continuous process.

 18. The method of claim 16 including simultaneously extruding and carrying a
25 plurality of said extruded filaments about said moving drawn yarns and causing said extruded filaments to bond with said moving drawn yarns in spaced helical paths.

5 19. The method of claim 16 including arranging said drawn yarns to be
substantially in engagement with adjacent of said drawn yarns.

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